Aerosil

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Aerosil is a fumed silica product developed in 1942 by Degussa AG in Germany.

Properties

Aerosil is pure silicon dioxide, made from vaporized silicon tetrachloride oxidized in high-temperature flame with hydrogen and oxygen. Aggregated amorphous nano-sized primary particles gives free flow to powder materials. It gives thickening effect and thixotropy by dispersing to liquid materials.

Standard hydrophilic products are made of primary particles from 7 nm to 40 nm, and also these products are surface modified to hydrophobic.

Applications

- As free-flow agent: toners, foods, pharmaceuticals, biological weapons[1]
- As rheology controller: paints, coatings, adhesives, sealants, plastics.
- Others: film, fiber, ceramics, catalyst support, glass.

External links

- Degussa-Aerosil

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Categories: Ceramic materials | Glass types | Chemical engineering | Thickening agents | Edible thickening agents
Hidden categories: Orphaned articles from February 2009 | All orphaned articles | All articles to be merged | Articles to be merged since February 2009

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